

VALVES

BEST-IN-CLASS VACUUM CONTROL SOLUTIONS



VALVES

OPTIMIZED PRODUCTIVITY FOR VACUUM PROCESSES

Committed to delivering high performance vacuum control solutions for more than 50 years, MKS Instruments remains focused on providing solutions that allow you to continuously improve the performance and productivity of your tools and equipment. Our innovative solutions for vacuum control are backed by our relentless focus on operational excellence to ensure your success. From sales to technical support experts around the globe, we strive to maintain a high level of customer responsiveness to ensure you get the product you need, when you need it. MKS has your vacuum valve needs covered.

- Isolation, downstream, upstream and closed-loop process control
- High performance, cost-effective solutions
- Extensive portfolio of valve options
- Flexible sizing and configurations
- Suitable for a wide range of applications



UPSTREAM FLOW CONTROL VALVES

Proportioning Valves

- Designed for precise control of gaseous flows
- Variety of fittings and elastomer seals
- Wide range of Full Scale flows
- Models include: 148J, 154B, 248D



VACUUM ISOLATION VALVES

Angle and Inline Valves

- Gauge and chamber isolation
- Diagnostic isolation
- High cycle capabilities for load lock chambers
- Specially designed corrosion-resistant valves for aggressive processes
- Rapid actuation
- Pneumatic, manual, and electromagnetic operation
- Adjustable conductance control using interchangeable orifices and metering devices
- Customization to meet your needs and specific applications



BUTTERFLY THROTTLE VALVES

T2BA

- On-board LCD touchscreen display of pressure and position
- Programmable for pressure or position control
- Encoder-based actual position verification
- Heatable valve body (105°C standard, 150°C and 200°C optional)
- EtherCAT®, DeviceNet™, RS232, RS485 and Analog/TTL models available



VACUUM VALVE

Spare Parts, Kits & Accessories

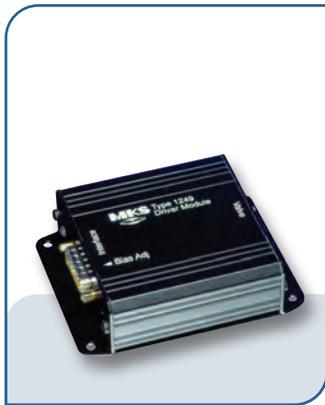
- Rebuild kits contain original MKS parts ensuring a perfect valve resulting in the proper vacuum seal after replacement
- Valve can be quickly repaired in place, reducing repair or maintenance down time
- Valve kits have a lower cost than replacing the entire valve

Upstream Flow Control Valves

Upstream flow control valves are proportioning control valves designed for precise control of gaseous flows upstream in the process.

Vacuum Isolation Valves

Vacuum isolation valves include bellows sealed valves, ball valves, soft start dual-stage valves, and safety shut off valves. These are available in a wide array of configurations including manual, pneumatic, and electromagnetic actuators.



SOLENOID CONTROL VALVE DRIVER

1249A

- Enables PC, PLC, or other user-supplied control algorithm to operate a proportioning control valve
- Makes use of existing system capabilities to lower the cost of pressure or flow control
- Flexible power and signal requirements
- Small package can be mounted wherever space is available

Exhaust Throttle Valves

T2BA Exhaust Throttle Valves with Integrated Controller are specifically designed for applications where a simple, yet advanced, pressure control system is desired. The T2BA integrates all control, communication, and driver circuits within a throttle valve assembly, eliminating the need for mounting a separate pressure control electronics module. The unique model-based control algorithm and high-speed operation drives the system to set point quickly with minimum overshoot, and ensures repeatable process recipes without operator involvement.

Vacuum Valve Spare Parts, Kits & Accessories

Rebuild kits contain original MKS parts ensuring a perfect valve resulting in the proper vacuum seal after replacement. Valve can be quickly repaired in place, reducing repair or maintenance down time, and valve kits have a lower cost than replacing the entire valve.

Solenoid Control Valve Driver

The 1249 Control Valve Driver provides the drive signal required to operate the MKS 148 and 248 Proportioning Solenoid Valves used for pressure or flow control. It is intended for use with PCs, PLCs, or other controllers that provide the necessary PID control functions, but which do not have the current output necessary to drive these valves.

WHY MKS?

CRITICAL TECHNOLOGIES

World-class technology and development capabilities for leading-edge processes



PROVEN PARTNER

Recognized leader delivering innovative, reliable solutions for our customers' most complex problems



OPERATIONAL EXCELLENCE

Consistent execution across all aspects of our business



COMPREHENSIVE PORTFOLIO

Extensive offering of products and services for the markets we serve



MKS Valves

6 Shattuck Road
Andover, MA 01810
+1 978-975-2350

MKS Corporate Headquarters

2 Tech Drive, Suite 201
Andover, MA 01810
+1 978-645-5500
+1 800-227-8766 (in USA)

MKS INSTRUMENTS, INC. enables technologies that transform our world. We deliver foundational technology solutions to leading edge semiconductor manufacturing, electronics and packaging, and specialty industrial applications.

We apply our broad science and engineering capabilities to create instruments, subsystems, systems, process control solutions and specialty chemicals technology that improve process performance, optimize productivity and enable unique innovations for many of the world's leading technology and industrial companies.

Our solutions are critical to addressing the challenges of miniaturization and complexity in advanced device manufacturing by enabling increased power, speed, feature enhancement, and optimized connectivity. Our solutions are also critical to addressing ever-increasing performance requirements across a wide array of specialty industrial applications.

Additional information can be found at www.MKS.com.

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